

# **Guidance for Reporting Progress in Pollution Prevention**

Prepared by

Washington State Department of Ecology Hazardous Waste and Toxics Reduction Program

> Revised February 1997 Publication # 93-38



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Ecology's Hazardous Waste and Toxics Reduction Program staffs environmental professionals who can answer your questions on hazardous waste issues. Toxics Reduction Specialists can suggest the best way for you to reduce the amount of hazardous waste generated by your business. They can also advise you on how to complete your pollution prevention plan. Hazardous Waste Specialists offer sound advice on how to stay in compliance with the Dangerous Waste Regulations. Call you nearest regional office at one of the numbers listed below.

| Central Regional Office - Yakima     | (509) 575-2490 |
|--------------------------------------|----------------|
| Eastern Regional Office - Spokane    | (509) 456-2926 |
| Northwest Regional Office - Bellevue | (509) 649-7000 |
| Southwest Regional Office - Lacey    | (360) 407-6300 |

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Regional TDD numbers are: Central Regional Office (509) 454-7673
Eastern Regional Office (509) 458-2055
Northwest Regional Office (509) 649-4259
Southwest Regional Office (360) 407-6306



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# Introduction

ince 1990, the Department of Ecology has administered the pollution prevention planning program provided for in Chapter 70.95C RCW. In 1995, Ecology decided to evaluate the planning process and the information collected through annual progress reports. The evaluations showed us that modifying and simplifying the guidance and reporting forms would help facilities achieve better pollution prevention results. The revisions found in this document were designed to meet that objective.

The pollution prevention planning process requires facilities to submit an Annual Progress Report to Ecology. This guidance document will help you meet that requirement. Completing the following worksheets according to their instructions should result in an acceptable report. **We highly recommend that you use the worksheets**, but it is not required. If you choose to use another format, be sure to address all the reporting elements included in WAC 173-307-080. These worksheets are available on diskette from the Ecology office nearest you.

## **Progress Report Due Date**

The progress report is due **September 1** of each year following your plan due date. Each Annual Progress Report needs to cover the preceding calendar year (January - December). Ecology welcomes early submittal of Annual Progress Reports.

### **Reporting Elements**

In your Pollution Prevention Plan, you may have selected pollution prevention opportunities to implement over a five-year period. Certain waste streams or hazardous substances may have been targeted for reduction. Also, you may have established five-year goals to guide your pollution prevention activities. The Annual Progress Report describes your advance toward these goals over the year, as required under WAC 173-307-080. The report should:

- Describe the opportunities you implemented during the reporting year. Include information on the effects of these actions, and describe new opportunities you have identified for later implementation.
- Provide information on new or amended five-year performance goals.
- Provide information on changing production or service levels.
- Explain the reasons for changing levels of hazardous waste generation and hazardous substance use over time.

# Multi-media Changes

Some facilities want their progress reports to address more than just hazardous substances and wastes. Feel free to describe other changes you have made at your facility in the past year. These could include changes in stormwater management, solid waste disposal or recycling, water or energy conservation, air emission control, or other environmental improvements or achievements.

# **Getting Started**

Ecology offers a range of technical assistance services that will help you complete your Annual Progress Report. Staff in our four regional offices and the Industrial Section at Ecology Headquarters in Lacey can answer your questions over the phone or on-site. Ecology periodically conducts workshops and other events to help you with your pollution prevention efforts. Assistance with plan preparation, plan implementation, progress report preparation, and regulatory interpretation are some of the available services. Feel free to call for this assistance.

# **Ecology Offices**

Regions Phone Numbers

Central (509) 575-2803

15 W Yakima Ave, Suite 200 Yakima, WA 98902-3401

Eastern (509) 456-6171

N 4601 Monroe, Suite 100 Spokane, WA 99205-5301

Northwest (206) 649-7040

3190 160th Ave SE Bellevue, WA 98008-5452

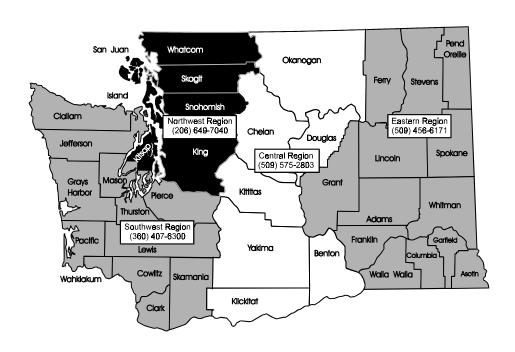
Southwest (360) 407-6354

PO Box 47775 Olympia, WA 98504-7775

Ecology Industrial Section (360) 407-6723

PO Box 47600

Olympia, WA 98504-7600



#### **Guidance for Worksheet 1**

# **Opportunity Status**

Worksheet 1 asks for information on pollution prevention opportunities implemented, and/or deferred, during the reporting year. The four steps below will help you with this task, and will help keep your pollution prevention plan current.

- 1. Review the five-year implementation schedule in your pollution prevention plan.
- 2. Identify the opportunities implemented, and other actions taken during the reporting year.
- 3. Sort the actions taken, and/or the actions deferred, into the four categories below.
- 4. Use Worksheet 1 to report on each opportunity as per the reporting instructions for each category.

#### Categories

# Opportunities that that were identified in the plan and implemented during the reporting year.

Reference each opportunity by the appropriate number and short name used in the plan. Do not re-describe the opportunity, but briefly discuss the effects of implementation and any problems encountered. Mention the processes affected and the hazardous substances, wastes and emissions impacted. Transfer summary information about this opportunity to Worksheet 2.

# New opportunities that were identified and implemented during the reporting year.

Opportunities that were significantly modified from the way they were described in the plan should also be included in this category if they were implemented. First describe each opportunity and give it a name and number, then discuss the effects of implementation and any problems encountered. Mention the processes affected and the hazardous substances, wastes and emissions impacted. Transfer summary information about this opportunity to Worksheet 2. (This information helps keep your plan current.)

# Opportunities that were scheduled for implementation but not implemented.

Identify each opportunity by name and number. Explain the reasons and/or problems that were encountered that prevented its implementation. Provide a revised implementation date or, if it has been dropped from further consideration, please indicate.

# New opportunities that were identified and will be implemented in future reporting years.

Describe each opportunity, give it a name and number, and provide an estimated implementation date.

# **Opportunity Status**

(Attach additional worksheets as needed)

| Facility Name: State / EPA or CRK Identification Number: Reporting Year:              |
|---|
| Complete this worksheet as described by the guidance on the previous page.            |
| Opportunity # Short nameCategory (circle one) A B C D Description and/or Discussion:  |
| Opportunity # Short nameCategory (circle one) A B C D Description and/or Discussion:  |
| Opportunity # Short name Category (circle one) A B C D Description and/or Discussion: |

# Summary of Opportunities Implemented and Results

(Attach additional worksheets as needed)

Use this worksheet to summarize the opportunities listed and/or described on Worksheet 1 that you implemented during the reporting year. Indicate **all** resulting effects that apply for each opportunity by putting a quantity or an "X" in the corresponding box . If the results can be quantified, enter the amount in the appropriate box. Otherwise, use an "X" (see the example). Quantities that are provided should be in pounds (or dollars for savings) and reflect the results of implementation for the twelve months of the reporting year.

|      | OPPORTUNITIES                       |                                      |                             | BENEFITS / RESULTS        |                                 |                                 |                                       |              |        |
|------|-------------------------------------|--------------------------------------|-----------------------------|---------------------------|---------------------------------|---------------------------------|---------------------------------------|--------------|--------|
| Opp# | Opportunity Name                    | Targeted<br>Substances<br>and Wastes | Haz Sub<br>Use<br>Reduction | Haz<br>Waste<br>Reduction | Increased<br>Waste<br>Recycling | Increased<br>Waste<br>Treatment | Air / Water<br>Emissions<br>Reduction | Cost Savings | Other* |
| 1    | (example) Install distillation unit | Xylene                               | 1,000                       | X                         | X                               |                                 |                                       | \$150        |        |
|      |                                     |                                      |                             |                           |                                 |                                 |                                       |              |        |
|      |                                     |                                      |                             |                           |                                 |                                 |                                       |              |        |
|      |                                     |                                      |                             |                           |                                 |                                 |                                       |              |        |
|      |                                     |                                      |                             |                           |                                 |                                 |                                       |              |        |
|      |                                     |                                      |                             |                           |                                 |                                 |                                       |              |        |

<sup>\*</sup> Consider other results that may have occurred, e.g. reduction in toxicity or risk, increased communications with workers, increased customer satisfaction. These other types of benefits / results may be described on a separate page that you attach to this worksheet.

#### **Guidance for Worksheet 3**

# **Goals and Progress**

Worksheet 3 is used to display the five-year performance goals established in your pollution prevention plan, or subsequently established or amended in annual progress reports. Please discuss your progress toward these and other goals.

#### Numeric Goals

If you established numeric five-year performance goals in your pollution prevention plan, or if they were subsequently established or amended in a **past** Annual Progress Report, enter those in the "**Current Goals**" row in the table on Worksheet 3.

If you have newly established five-year performance goals, or if during the reporting year you amended what were previously your current goals, enter them in the "Amended or New Goals" row of the table.

If the current goals were amended during the reporting year, please explain why the change was made. Also, discuss your progress toward setting numeric goals if none currently exist.

#### Non-numeric Goals

Describe any new non-numeric goals, such as improving employee awareness or increased worker safety. Please describe them.

#### **Progress**

Progress on individual opportunities, as reported on Worksheet 2, may not fully describe your overall progress toward facility performance goals. Your progress toward goals may be affected positively or negatively by factors other than implementation of individual pollution prevention opportunities.

For example, you may have improved employee awareness through training, resulting in better progress toward your goals than implementing specific opportunities would account for. A discussion about your progress toward meeting your numeric and/or non-numeric goals is requested.

If possible, provide quantified progress toward your goals. Alternatively, your discussion might include an estimated percentage of each goal that has been achieved through this reporting year.

Use the space provided on Worksheet 3 to discuss progress.

# **Goals and Progress**

#### **Numeric Goals**

|                         | Hazardous      | Hazardous      | Hazardous     | Hazardous    |
|-------------------------|----------------|----------------|---------------|--------------|
|                         | Substance Use  | Waste          | Waste to be   | Waste to be  |
|                         | Reduction Goal | Reduction Goal | Recycled Goal | Treated Goal |
| Current Goals           |                |                |               |              |
| Amended or<br>New Goals |                |                |               |              |

If the current goals were amended during the reporting year, explain why:

If numeric goals have not been established, discuss your progress toward setting them:

### **Non-numeric Goals**

Describe any new non-numeric goals, such as improving employee awareness or increased worker safety.

#### **Progress**

Discuss progress toward numeric and non-numeric goals as described in the guidance on the previous page.

#### Production / Service Levels

#### Production or Service Levels

Changes in levels of production or service sometimes affect the amount of hazardous substances used and hazardous waste generated. Measurements of progress over time need to consider these changes. This is done by comparing units of production or service during the reporting year with the base year of your pollution prevention plan.

While actual production levels can be informative, you need only to report a "production factor." **Refer to the unit of measure and the production or service level you identified in your pollution prevention plan**.

Using the same unit of measure, determine your production or service level for the reporting year. Next, calculate the factor by dividing the level in the reporting year by the level in the base year. This will result in a factor greater than 1.0 if production or service has increased, and less than 1.0 if production or service decreased.

Example: Reporting Year level = 1,200 Base Year level = 1,000

Production Factor =  $\frac{1,200}{1,000}$  = 1.2

| Enter the Production Factor for this | Reporting Year: |  |
|--------------------------------------|-----------------|--|
|--------------------------------------|-----------------|--|

## Option

If it is simpler to display actual production or service levels instead of calculating a production factor, you may wish to use the table below. Enter the quantities produced of the identified unit in the appropriate box. An example is provided. Looking at production levels from year to year may help you complete Worksheets 5 and 6.

| Production Unit(s) | Base Year | Reporting Year |      |      |    |    |
|--------------------|-----------|----------------|------|------|----|----|
|                    | 19        | 19             | 19   | 19   | 19 | 19 |
| (example)          | 1000      | 1050           | 1150 | 1200 |    |    |
| Boats Manufactured |           |                |      |      |    |    |
|                    |           |                |      |      |    |    |
|                    |           |                |      |      |    |    |

## Changes in Hazardous Waste Generation

One purpose of this report is to place the effects of pollution prevention activities in context with other changes that take place from year to year. One way to accomplish this is to examine the types and amounts of waste you reported on your Dangerous Waste Annual Report for the last calendar year (the reporting year). Compare this information with what you reported in the year prior to that, and identify the reasons for the changes. Explaining the reasons for any differences between the two reports will make it easier to understand trends and measure progress. This is especially true when the information is monitored over the five year life of your plan.

#### Instructions

Review your most current Dangerous Waste Annual Report, which should be for the same calendar year as covered by this progress report, and the one for the prior year. **Briefly** explain any **significant** changes, either increases or decreases, to **key** waste streams. If year-to-year variations were anticipated and explained in your plan, you do not need to repeat the explanation here.

Key waste streams might include those targeted for reduction, recycling or treatment in your pollution prevention plan, or any others experiencing a significant change in status.

Reasons could include things such as:

- implementation or termination of pollution prevention actions;
- changes in business practices, like process changes, new product lines, etc.;
- changes in reporting requirements such as delisting, new listing, etc.;
- increase or decrease in level of production; and
- intermittent or one time waste management activities.

These are examples only. Mentioning other specific actions that occurred will provide a better understanding of your facility's hazardous waste generation trends.

Explanation (Attach additional pages if needed)

# Worksheet 6 - Optional

## Changes in Hazardous Substance Use

Currently there is no requirement to track the types and amounts of hazardous substances, or products containing hazardous substances, after the base year of your plan. Many facilities, however, find yearly tracking valuable.

If you track hazardous substance use, changes in use from year to year and reasons for the changes are of interest to Ecology as indicators of pollution prevention progress. If you can provide this information, which is *optional*, **briefly** explain any **significant** changes, either increases or decreases, to the quantities used.

Reasons could include:

- implementation or termination of pollution prevention actions;
- changes in business practices such as process changes, new product lines, etc.;
   or
- increases or decreases in level of production.

These are examples only. Mentioning other specific actions that occurred will provide a better understanding of your facility's hazardous substance use trends.

This table may be useful for tracking quantities of hazardous substances used over time. An example is provided.

|                        | Annual Quantities Used, in Pounds |        |                |       |        |    |
|------------------------|-----------------------------------|--------|----------------|-------|--------|----|
| Hazardous Substance or | Base Yea                          | r      | Reporting Year |       |        |    |
| Product Containing     | 19                                | 19     | 19             | 19    | 19     | 19 |
| Hazardous Substance    |                                   |        |                |       |        |    |
| (example)              | 12,000                            | 11,500 | 3,200          | 3,200 | 14,000 |    |
| Anhydrous ammonia      |                                   |        |                |       |        |    |
|                        |                                   |        |                |       |        |    |
|                        |                                   |        |                |       |        |    |
|                        |                                   |        |                |       |        |    |
|                        |                                   |        |                |       |        |    |
|                        |                                   |        |                |       |        |    |
|                        |                                   |        |                |       |        |    |

**Explanation** (Attach additional pages if needed)